

IN THE CLAIMS:

Claim 1 (currently amended): An evacuation system, comprising:

a housing including a product package containing a product; ~~and~~

an evacuation member disposed in the housing, wherein the evacuation member engages the product package and applies pressure thereto, such that product in the product package moves toward an outlet in the product package for dispensing;

a driver in communication with the evacuation member, wherein the driver moves the evacuation member to dispense product when the driver is powered; and

a controller in electrical communication with the driver, wherein the controller powers the driver for a predetermined interval to dispense product from the product package, and further wherein the controller monitors the current applied to the driver, thereby deducing the forces applied to the product package.

Claim 2 (original): The evacuation system according to claim 1, further comprising:

a valve disposed at the outlet of the product package to regulate the flow therefrom.

Claim 3 (original): The evacuation system according to claim 2, wherein the valve is a pinch valve.

Claim 4 (currently amended): An The evacuation system ~~according to claim 1, comprising:~~

a housing including a product package containing a product; and

an evacuation member disposed in the housing, wherein the evacuation member engages the product package and applies pressure thereto, such that product in the product package moves toward an outlet in the product package for dispensing, and further wherein a pump is coupled to an outlet of the product package for evacuating the product from the package.

Claim 5 (canceled).

Claim 6 (currently amended): The evacuation system according to claim 1 5, wherein the driver is a motor.

Claim 7 (currently amended): The evacuation system according to claim 2 5, wherein a the controller opens the valve during the ~~and drives the driver~~ for a predetermined period, thereby dispensing product from the package.

Claim 8 (canceled).

Claim 9 (currently amended): The evacuation system according to claim 1 8, wherein the controller operates the evacuation member to preload the package.

Claim 10 (original): The evacuation system according to claim 9, wherein the controller maintains the force applied to the product package by the evacuation member below a maximum threshold to ensure that the product package does not rupture.

Claim 11 (currently amended): An ~~The~~ evacuation system ~~according to claim 7, further comprising:~~
a housing including a product package containing a product;
an evacuation member disposed in the housing, wherein the evacuation member engages the
product package and applies pressure thereto, such that product in the product package moves toward an
outlet in the product package for dispensing;
a driver in communication with the evacuation member, wherein the driver moves the evacuation
member to dispense product when the driver is powered; and
a controller in electrical communication with the driver, wherein the controller powers the driver
for a predetermined interval to dispense product from the product package, and further wherein an
encoder in communication with the driver and the controller, wherein the encoder outputs a signal to the
controller indicating the location of the evacuation member.

Claim 12 (original): The evacuation system according to claim 11, wherein the controller recognizes a maximum encoder count when the evacuation member has reached full travel, thereby indicating that the product package is empty.

Claim 13 (currently amended): An The evacuation system according to claim 7, comprising:
a housing including a product package containing a product;
an evacuation member disposed in the housing, wherein the evacuation member engages the
product package and applies pressure thereto, such that product in the product package moves toward an
outlet in the product package for dispensing;
a driver in communication with the evacuation member, wherein the driver moves the evacuation
member to dispense product when the driver is powered; and
a controller in electrical communication with the driver, wherein the controller powers the driver
for a predetermined interval to dispense product from the product package, and further wherein a
microswitch is closed when the evacuation member reaches full travel, thereby notifying the controller
that the package is empty.

Claim 14 (currently amended): An The evacuation system according to claim 7, comprising:
a housing including a product package containing a product;
an evacuation member disposed in the housing, wherein the evacuation member engages the
product package and applies pressure thereto, such that product in the product package moves toward an
outlet in the product package for dispensing;
a driver in communication with the evacuation member, wherein the driver moves the evacuation
member to dispense product when the driver is powered; and
a controller in electrical communication with the driver, wherein the controller powers the driver
for a predetermined interval to dispense product from the product package, and further wherein a hall
effect sensor is activated when the evacuation member reaches the end of the travel path, thereby
signaling the controller of an empty package condition.

Claims 15-17 (canceled).

Claim 18 (currently amended): An ~~The~~ evacuation system according to claim 17, comprising: a housing including a product package containing a product; an evacuation member disposed in the housing, wherein the evacuation member engages the product package and applies pressure thereto, such that product in the product package moves toward an outlet in the product package for dispensing; and at least one roller to engage the product package, wherein the roller is weighted to move through the travel path due to gravitational forces.

Claim 19 (canceled).

Claim 20 (currently amended): An ~~The~~ evacuation system according to claim 19, comprising: a housing including a product package containing a product; an evacuation member disposed in the housing, wherein the evacuation member engages the product package and applies pressure thereto, such that product in the product package moves toward an outlet in the product package for dispensing; and at least one squeegee to engage the product package, wherein the squeegee is weighted to move through the travel path due to gravitational forces.

Claim 21 (original): The evacuation system according to claim 4, further comprising:

a pump driver unit disposed in the housing, wherein the pump is coupled to the pump driver to actuate the pump, thereby evacuating the product from the product package.

Claim 22 (currently amended): An ~~The~~ evacuation system according to claim 1, further comprising:

a housing including a product package containing a product;

an evacuation member disposed in the housing, wherein the evacuation member engages the product package and applies pressure thereto, such that product in the product package moves toward an outlet in the product package for dispensing; and

a package carrier, the package carrier including a package support and a restraining support hingedly coupled to the package support, wherein a product package is inserted into the package support and the restraining support is closed, thereby easing handling and support during insertion into the housing.

Claim 23 (original): The evacuation system according to claim 22, wherein the package carrier includes a pinch-off area, whereby, when the restraining support is closed, product is displaced from an unrecoverable portion of the product package, and the unrecoverable portion is pinched off, such that the product remains in a recoverable portion of the product package.

Claim 24 (original): The evacuation system according to claim 23, wherein the pinch-off area creates a product package volume having a bottom with a slope toward the product package outlet, thereby forcing product to move toward a recoverable portion of the product package.

Claim 25 (currently amended): An ~~The~~ evacuation system according to claim 7, comprising:

a housing including a product package containing a product;

an evacuation member disposed in the housing, wherein the evacuation member engages the product package and applies pressure thereto, such that product in the product package moves toward an outlet in the product package for dispensing;

a driver in communication with the evacuation member, wherein the driver moves the evacuation member to dispense product when the driver is powered; and

a controller in electrical communication with the driver, wherein the controller powers the driver for a predetermined interval to dispense product from the product package, and further wherein the controller determines a frictional voltage profile for the evacuation member and adds the frictional profile to a working voltage profile, thereby ensuring that the evacuation member applies a desired squeeze force to the product package.

Claim 26 (new): An evacuation system, comprising:

a housing including a product package containing a product;

an evacuation member disposed in the housing, wherein the evacuation member engages the product package and applies pressure thereto, such that product in the product package moves toward an outlet in the product package for dispensing; and

at least one roller disposed within the evacuation member, wherein the at least one roller is biased against a backing plate to engage the product package, and further wherein the at least one roller may overcome the biasing force, and move away from the backing plate to accommodate varying product particulate sizes.

Claim 27 (new): The evacuation system according to claim 26, wherein the biasing force is spring pressure.